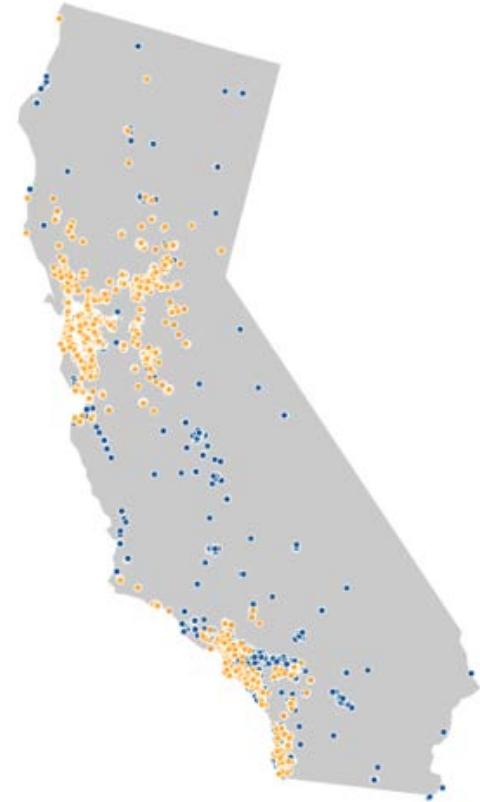


California Successes

- Engagement & Collaboration
 - Regional HIEs functioning and expanding for 25 years
 - 25 organizations using Epic's HIE solutions, many for > 5 years
 - eHealth Exchange:
 - Dignity Health, 12 Epic organizations, 3 regional HIEs, VA, DoD SSA, dialysis centers, pharmacy and employer-based clinics
 - HIE as a Team Sport
 - Collaborate – meetings, newsletters, networking
 - Remove authorization requirements
 - Automate patient queries
 - Share configurations, performance data, and best practices
 - Collaboration between vendors
 - Epic, Cerner, AthenaHealth, VA
 - Patient matching, duplicated data, novel use of CCD to transmit encounter-specific data to payers, Carequality pilots
- Sutter Health's Experience
 - 1.9 of 3 million active patients with outside chart linkages
 - 5M patient queries / month => 100K new
 - 17M records exchanged since 2010; 12M in 2015 alone
 - Currently receiving > 1M records and sending >500K records / month
 - Majority of encounters have outside data available for review
 - Direct messaging: 10K Sutter Health providers enabled with access to 250K addresses
 - 15K messages sent, 25K received / month; >95% automated for MU2 ToC



Meaningful Use of Available Data

- Challenge:
 - Drowning in data – *TMI*
 - Transitions of care, event notifications
 - Discrete data from CCDs - must be reviewed, reconciled with curated record
 - Duplicate, outdated information from different or same organization limits clinicians ability to identify important data at point of care
 - External data kept separated until reconciled or copied into local chart
 - New available external data viewed in 14% (3-48) of encounters (24 CA organizations)
 - Information Reconciliation – problems, medications, allergies, immunizations
 - Reportable Measure in *Advancing Care Information* NPRM
 - Inefficient manual processes – duplicated data, multiple sources
 - Reconciliation rates for 22 California organizations:
 - Meds 45% (3-65), Allergies 12% (1-85), Problems 10% (1-23)
- Needs:
 - *5 Rights of HIE* – Data, User, Time, Format, Functionality
 - Discrete Data Access - Standards and technology to support more data types
 - Lab results, Procedures, Immunizations, Care gaps
 - Data Preparation – “collecting, cleaning, and consolidating data for analysis”
 - Data Reconciliation – Automate processes

Clinical Messaging

- Challenge:
 - Care Coordination requires multi-directional ad hoc communication
 - When it works it is transformative
 - Current capability of integrated systems utilizing a common EHR
 - New secure texting apps – not integrated into EHR systems
 - Continued use of paper/fax processes due to inconsistent adoption of Direct
 - NOT efficient, secure or integrated
 - Variable implementation by healthcare organizations
 - 19 of 25 California organizations on Epic have published directories
 - Many stakeholders unengaged - pharmacists, therapists, home care, care managers
 - Functional limitations of existing vendor solutions
- Needs:
 - Vendor certification standards
 - Directories: Standard data elements, Maintenance & updates; Exchange
 - Functionality: Message priority; feedback re failed transmissions, read receipt, unread messages, reply, auto-reply, forwarding, cross-coverage, pools
 - Attachments: Multiple document formats
 - Operational standards for providers, hospitals, and other users
 - Message delivery: Intended recipient, cross-covering provider, pools/groups
 - Management of multiple message types: ToC, care coordination, curbside consults

Take Aways

- Specific/actionable recommendations for ONC:
 1. Vendor certification requirements
 - Send, receive, and prepare discrete data
 - Streamline data reconciliation workflows
 - Support robust bidirectional clinical messaging
 2. User operational standards
 - Send, receive, route, and manage clinical messages